

Finding of Suitability to Support the Public-Private Venture of the Department of the Navy Housing

**PEARL HARBOR NAVAL COMPLEX, CAMP STOVER,
NCTAMS PAC WAHIAWA, OAHU and PMRF KAUAI, HAWAII**

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**Department of the Navy
Commander, Pacific Division
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**Environmental Engineering Services
Contract Number N62472-02-D-1801, CTO 0008**

Canec building materials may exist at the Subject Property. The potential exists for arsenic exposure during renovation and/or demolition of canec building materials. This is a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Landfills: The Ford Island Landfill, located both on-site and in the vicinity of Housing Area 2 (Ford Island), was assigned an IR Program ranking of Category 5 indicating that some response actions had been undertaken but long-term monitoring and Land-Use Controls are required. This is a finding of concern for the Class I Property (land) at Housing Area 2 (Ford Island).

Lead-based Paint: A LBP survey and risk assessment was conducted for the five groups of pre-1978 housing units within Housing Area 2 (Ford Island), grouped by year of construction. LBP was detected at all five housing groups. Dust wipe samples collected from interior windowsills of three of the units contained concentrations of lead exceeding the HUD hazard level for windowsills of 250 $\mu\text{g}/\text{ft}^2$. All twenty-seven units were found to contain components painted with LBP in poor or fair condition. For additional details and recommendations specific to LBP and LBP hazards at Housing Area 2 (Ford Island), see the *Lead Based Paint Survey and Risk Assessment for Ford Island*. The presence of LBP and LBP hazards is a finding of concern for the Class II Property (improvements) at Housing Area 2 (Ford Island), with the exception of the 140 units constructed at Luke Field in 2003.

Operational Contamination/Installation Restoration (IR) Program Sites: There are two IR Program sites located within Housing Area 2 (Ford Island) that require no additional response actions (Category 2a, 3, or 4): (1) 55 Naval Facilities Engineering Command, Hawaii (NAVFAC HI) Transformer sites (Category 3 and 4), and (2) the Camel Refurbishing Area (Category 4). The Camel Refurbishing Area has recently undergone remedial action. No further response action (Category 4) was recommended at this site. These sites are within Housing Area 2 (Ford Island). These past release sites require notification for the Class I Property (land) at Housing Area 2 (Ford Island).

According to the Site Summary Report (SSR) performed for Ford Island, there were 55 transformer sites comprising an IR Program site. These sites were identified as requiring additional investigation at Ford Island. Eight of these transformers are on-site. Three of the on-site transformers (TK-01D, TL-02, and S252D) were identified in the RI for Ford Island as not requiring further response actions. These transformers are classified as Category 3. The remaining five transformer sites within Housing Area 2 (Ford Island) (TG-01, TG-03, TG-04, TA-01, and TD-01) were identified in the RI for Ford Island as requiring soil removal actions. Soil was excavated to 1 ppm or less for these sites. LUCs are required for TG-04. These IR Program sites are classified as Category 4 (i.e., no further response actions required), with the exception of TG-04 which is a Category 4 with LUCs. These past release sites require notification for the Class I Property (land) at Housing Area 2 (Ford Island).

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Polychlorinated Biphenyls: According to the SSR for Ford Island, there were 55 transformer sites comprising an IR Program site. Eight of these transformers are on-site. These sites were identified as requiring additional investigation at Ford Island. Three of the on-site transformers (TK-01D, TL-02, and S252D) were identified in the RI for Ford Island as not requiring further response actions. These transformers are classified as Category 3. The remaining five transformer sites within Housing Area 2 (TG-01, TG-03, TG-04, TA-01 and TD-01) were identified in the RI for Ford Island as requiring soil removal actions. Soil was excavated to 1 ppm or less for these sites. LUCs are required for TG-04. These IR Program sites are classified as Category 4 (i.e., no further response actions required), with the

Operational Contamination/Installation Restoration Program Sites: Solid Waste Management Unit (SWMU) SY-84a (Shipyard storm drainage system), has been assigned an ECP ranking of Category 5 because this site is planned for investigation as part of the IR Program under Site Management Plan (SMP) Group 10. Because this structure has been included in SMP Group 10, and some investigation and actions has been taken at this site, response actions are considered to be underway. However, all required response actions have not been completed. The site reconnaissance of 1 May 2006 found storm drains structures at several locations within Housing Area 3 (Hale Alii). This is a finding of concern for the Class I Property (land) at Housing Area 3 (Hale Alii) because this structure is located both within Housing Area 3 (Hale Alii) and in the vicinity of Housing Area 3 (Hale Alii).

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Polychlorinated Biphenyls: Five transformer sites (G-6, G-8, G-10, G-11 and G-22) have been assigned an ECP ranking of Category 3 because releases of hazardous substances were identified at these sites; however, concentrations of contaminants were below action levels, and response actions were not required. These past release sites require notification for the Class I Property (land) within Housing Area 3 (Hale Alii).

Wastewater and Storm Water: SWMU SY-84a (Shipyard storm drainage system), has been assigned an ECP ranking of Category 5 because this site is planned for investigation as part of the IR Program under site management plan (SMP) Group 10. This is a finding of concern for the Class I Property (land) at Housing Area 3 (Hale Alii) because this structure is located both within Housing Area 3 (Hale Alii) and off-site of Housing Area 3 (Hale Alii).

Other On-site Findings: Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, radioactive material in smoke detectors, monitors, etc.) may be present at the Subject Property. This is a finding of potential concern for the Class II Property (improvements) at Housing Area 3 (Hale Alii).

6.3.2 Off-Site Findings

Aboveground and Underground Storage Tanks and Petroleum-Related Structures: Two ASTs (1374(D) and 1375(D)) and one UST, 6(SY)(D), have been assigned an ECP ranking of Category 5 because response actions are underway, but all required response actions have not been completed. Nine ASTs (19(D), 20(D), 21(D), 23(D), 24(D), 25(D), 26(D) 27(D) and 28(D)); seventeen USTs (45, 69, 168, 189, 199, 206, 207a, 207b, 210a, 210b, 211, 213a, 213b, NS-6(D), S932 and Former Gasoline Stations A and B) and three petroleum related structures (Buildings 25(D) and 77(D) and abandoned fuel pipeline corridors) have been assigned an ECP ranking of Category 2e. Three ASTs (15(D), 18(D) and 22(D)) and 17 USTs (2(SY)(D), 5(SY)(D), 7(SY)(D), 10(SY)(D), 11(SY)(D), 14(SY)(D), 21(SY), 25(SY)(D), PW-5(D), PW-8(D), PW-11(D), PW-122, NS-4(D), NS-8(D), NS-16(D), NS-17(D) and NSMB-14(D)) and Building 8 plume have been assigned an ECP ranking of Category 2c. These are findings of concern for the Class I Property (land) at Housing Area 3 (Hale Alii).

Manmade pathways, including underground fuel lines, may provide a conduit for contamination migration between the Halawa-Main Gate area of the Pearl Harbor Naval Complex (PHNC) and HAFB to the Shipyard, particularly if the contamination stems from leaking underground fuel lines. Therefore, these are considered findings of concern for the Class I Property (land) at Housing Area 3 (Hale Alii).

The presence of lead-contaminated soil is a finding of concern for the Class I Property (land) within Housing Area 4 (Hospital Point).

Canec building materials may exist at the Subject Property. The potential exists for arsenic exposure during renovation and/or demolition of canec building materials. This is a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Lead-based Paint: A LBP survey and risk assessment was conducted for the seven groups of housing units Housing Area 4 (Hospital Point), grouped by year of construction. LBP was detected at all seven housing groups. Dust wipe samples collected from the interior of three of the units contained concentrations of lead exceeding HUD hazard level of 250 µg/ft² for windowsills. All nineteen assessed units were found to contain components painted with LBP in poor or fair condition. For additional details and recommendations specific to LBP and LBP hazards at Housing Area 4 (Hospital Point), see the *Lead Based Paint Survey and Risk Assessment for Hospital Point*. The presence of LBP and LBP hazards is a finding of concern for the Class II Property (improvements) at Housing Area 4 (Hospital Point).

Operational Contamination/Installation Restoration Program Sites: O2 [Oscar 2] Pier plume has been assigned an ECP ranking of Category 2c for IR because response actions for releases of petroleum products are underway, but all required response actions have not been completed. This is a finding of concern for the Class I Property (land) within Housing Area 4 (Hospital Point) because this site is both on-site and in the vicinity of Housing Area 4 (Hospital Point).

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Polychlorinated Biphenyls: Transformer site A-4 was identified as requiring soil removal actions (Category 4). Soil was excavated to 1 ppm or less for this site. This past release site requires notification for the Class I Property (land) at Housing Area 4. Transformer site A-2 requires additional response actions (Category 5). In addition, up to 3 ppm PCB has been found at Oscar 2 Pier. Oscar 2 Pier is both on-site and in the vicinity of Housing Area 4 (Hospital Point). It has an ECP ranking of Category 2c for IR. These sites are finding of concern for the Class I Property (land) within Housing Area 4 (Hospital Point).

Other On-site Findings: Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, monitors, radioactive material in smoke detectors, etc.) may be present at the Subject Property. This is a finding of potential concern for the Class II Property (improvements) at Housing Area 4 (Hospital Point).

6.4.2 Off-Site Findings

Aboveground and Underground Storage Tanks and Petroleum-Related Structures: Two ASTs (1374(D) and 1375(D)) and one UST (6(SY)(D)) have been assigned an ECP ranking of Category 5 for AUP because response actions are underway, but all required response actions have not been completed. Five USTs (213a, 213b, S932, Former Gasoline Station A, and Former Gasoline Station B), two petroleum related structures (Building 76 and the abandoned fuel pipeline corridors) and 9 ASTs of the former lower Tank Farm (19(D), 20(D), 21(D), 23(D), 24(D), 25(D), 26(D), 27(D) and 28(D)) have been assigned an ECP ranking of Category 2c for AUP. These are findings of concern for the Class I Property (land) at Housing Area 4 (Hospital Point) because these tanks and structures are located in the vicinity of Housing Area 4 (Hospital Point).

Cultural Resources: Historic facilities (cultural resources) exist within Housing Area 5 (Makalapa). These are findings of concern for the Class I Property (land) and Class II Property (improvements) within Housing Area 5 (Makalapa).

Heavy Metals: Canec building materials may exist at the Subject Property. The potential exists for arsenic exposure during renovation and/or demolition of canec building materials. This is a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Lead-based Paint: A LBP survey and risk assessment was conducted for Housing Area 5 (Makalapa). LBP was detected at Makalapa housing units. Dust wipe samples collected from interior surfaces in eight of the units contained concentrations of lead exceeding HUD hazard levels of 40 µg/ft² for floors and 250 µg/ft² for windowsills. Ninety-four percent (94%) of the units were found to contain components painted with LBP in poor or fair condition. For additional details and recommendations specific to LBP and LBP hazards at Housing Area 5 (Makalapa), see the *Lead Based Paint Survey and Risk Assessment for Makalapa*. The presence of LBP and LBP hazards is a finding of concern for the Class II Property (improvements) at Housing Area 5 (Makalapa) with the exceptions of the playgrounds remediated by the DoN on or before August 28, 2006 at Makalapa (this includes the playground behind 7 & 9 Kamakani Place, the basketball court behind 9 Midway Drive, the playground next to 3 Midway Drive, and the Tennis Court behind 40 Halawa Drive).

Several structures were observed with external peeling paint despite the exterior paint being in overall fair to good condition. These structures include 3A/3B Samoa Place (Fac. 49), the white wooden guardrail along Samoa Place, detached carport and housing structure 5A/5B Makalapa Drive (Fac. 43), detached carport 3A/3B Makalapa Drive (Fac. 42), attached carport 5 Midway Drive (Fac. 27), detached carport 8A/8B Kamakani Place (Fac. 38) and housing structure 10 Midway Drive (Fac. 59). The peeling paint on these structures is a LBP hazard finding of concern for the Class I Property (land) and the Class II Property (improvements) at Housing Area 5 (Makalapa).

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Other On-site Findings: Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, monitors, radioactive material in smoke detectors, etc.) may be present at the Subject Property. This is a finding of potential concern for the Class II Property (improvements) at Housing Area 5 (Makalapa).

6.5.2 Off-Site Findings

Cultural Resources: Historic facilities (cultural resources) exist in the vicinity of Housing Area 5 (Makalapa) including the former Radio Site and Building 250. These are findings of concern for the Class I Property (land) at Housing Area 5 (Makalapa).

Hazardous Substances/Hazardous Materials/Hazardous Waste: According to the SSR for Makalapa Crater, four structures (Landfill Area, Early Disposal Area, Former Pesticide Rinsate Area and the Clean Fill Area) have been assigned an ECP ranking of Category 5 for HS/HM/HW because sites requiring response actions have been identified and all required response actions at these sites have not been completed. These are findings of concern for the Class I Property (land) at Housing Area 5 (Makalapa) because the northwest portions of the Category 5 sites are located adjacent to Housing Area 5 (Makalapa).

Based Paint Survey and Risk Assessment for Marine Barracks. The presence of LBP and LBP hazards is a finding of concern for the Class II Property (improvements) at Housing Area 7 (Marine Barracks).

Operational Contamination/Installation Restoration Program Sites: SWMU SY-84a (Shipyard storm drainage system), has been assigned an ECP ranking of Category 5 because this site is planned for investigation as part of the IR Program under SMP Group 10. Because this structure has been included in SMP Group 10, and some investigation and actions has been taken at this site, response actions are considered to be underway. However, all required response actions have not been completed. The site reconnaissance of 1 May 2006 found several storm drains within Housing Area 7 (Marine Barracks). This is a finding of concern for the Class I Property (land) at Housing Area 7 because this structure is located both within Housing Area 7 (Marine Barracks) and in the vicinity of Housing Area 7 (Marine Barracks).

One transformer site, Station D-11, in Building S-986 across from Unit 203, has been assigned an ECP ranking of Category 3 for IR because releases of hazardous substances was identified; however, concentrations of contaminants were below action levels, and response actions were not required. This past release site requires notification for the Class I Property (land) at Housing Area 7.

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Polychlorinated Biphenyls: One transformer site, Station D-11, in Building S-986 across from Unit 203, has been assigned an ECP ranking of Category 3 because releases of hazardous substances was identified; however, concentrations of contaminants were below action levels, and response actions were not required. This past release site requires notification for the Class I Property (land) at Housing Area 7 (Marine Barracks).

Wastewater and Storm Water: SWMU SY-84a (Shipyard storm drainage system), has been assigned an ECP ranking of Category 5 because this site is planned for investigation as part of the IR Program under SMP Group 10. Because this structure has been included in SMP Group 10, and some investigation and actions has been taken at this site, response actions are considered to be underway. However, all required response actions have not been completed. The site reconnaissance of 1 May 2006 found several storm drains within Housing Area 7 (Marine Barracks). This is a finding of concern for the Class I Property (land) at Housing Area 7 because this structure is located both within Housing Area 7 (Marine Barracks) and in the vicinity of Housing Area 7 (Marine Barracks).

Other On-site Findings: Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, monitors, radioactive material in smoke detectors, etc.) may be present at the Subject Property. This is a finding of potential concern for the Class II Property (improvements) at Housing Area 7 (Marine Barracks).

6.7.2 Off-Site Findings

Aboveground and Underground Storage Tanks and Petroleum-Related Structures: Two ASTs (1374(D) and 1375(D)) and one UST (6(SY)(D)) have been assigned an ECP ranking of Category 5 for AUP because response actions are underway, but all required response actions have not been completed. Nine ASTs (19(D), 20(D), 21(D), 23(D), 24(D), 25(D), 26(D), 27(D) and 28(D)); seventeen USTs (45, 69, 168, 189, 199, 206, 207a, 207b, 210a, 210b, 211, 213a, 213b, NS-6(D), S932 and Former Gasoline Stations A and B) and four petroleum related structures (Buildings 25(D), 76(D), and 77(D) and abandoned fuel pipeline corridors) have been assigned an ECP ranking of Category 2e for AUP. Twelve

Canec building materials may exist at the Subject Property. The potential exists for arsenic exposure during renovation and/or demolition of canec building materials. This is a finding of concern for the Class II Property (improvements) within the Subject Property.

Lead-based Paint: A LBP survey and risk assessment was conducted for three groups of housing units within Housing Area 8 (NCTAMS PAC Wahiawa), grouped by year of construction. LBP was detected at all three housing groups. Dust wipe samples collected from interior surfaces did not contain concentrations of lead exceeding the HUD hazard levels of 40 $\mu\text{g}/\text{ft}^2$ for floors and 250 $\mu\text{g}/\text{ft}^2$ for windowsills. The majority of the units were found to contain components painted with LBP in poor or fair condition. For additional details and recommendations specific to LBP and LBP hazards at Housing Area 8 (NCTAMS PAC Wahiawa), see the *Lead Based Paint Survey and Risk Assessment for NCTAMS*. The presence of LBP and LBP hazards is a finding of concern for the Class II Property (improvements) at Housing Area 8 (NCTAMS PAC Wahiawa).

Operational Contamination/Installation Restoration Program Sites: Transformers at Building 118, S119 and 120 are IR Program sites and require additional response actions (Category 5). These sites are within Housing Area 8 (NCTAMS PAC Wahiawa) and are findings of concern for the Class I Property (land) within Housing Area 8 (NCTAMS PAC Wahiawa).

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property and in the soils in the vicinity of the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Polychlorinated Biphenyls: Transformers at Building 118, S119 and 120 are IR Program sites and require additional response actions (Category 5). These sites are within Housing Area 8 (NCTAMS PAC Wahiawa) and are findings of concern for the Class I Property (land) at Housing Area 8 (NCTAMS PAC Wahiawa).

Radon. The geologic formations of the Hawaiian Islands generally do not result in structures with elevated radon concentrations. However, elevated radon levels have been reported at other military installations on Oahu. No radon screening reports or test results were available for NCTAMS PAC Wahiawa, thus it is possible that radon occurs in the NCTAMS PAC Wahiawa Housing Area at levels exceeding the USEPA recommended corrective action level of 4 pCi/L. Radon is a finding of concern for the Class II Property (improvements) within Housing Area 8 (NCTAMS PAC Wahiawa).

Other On-site Findings: Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, monitors, radioactive material in smoke detectors, etc.) may be present at the Subject Property. This is a finding of potential concern for the Class II Property (improvements) at Housing Area 8 (NCTAMS PAC Wahiawa).

6.8.2 Off-Site Findings

Aboveground and Underground Storage Tanks and Petroleum-Related Structures: A tank at Former Building 63 (Site UST 9), located in the vicinity of Housing Area 8 (NCTAMS PAC Wahiawa), is an IR Program Site that requires additional evaluation (Category 7). This site is a finding of concern for the Class I Property (land) at Housing Area 8 (NCTAMS PAC Wahiawa).

A UST site at Building 261 is located in the vicinity of Housing Area 8 (NCTAMS PAC Wahiawa). A previous release was reported for this tank and contaminated soil was left under the pavement. This site requires response actions that have not been implemented (Category 2d). This site is a finding of concern for the Class I Property (land) at Housing Area 8 (NCTAMS PAC Wahiawa).

action is required). The minimal release to soil from soil samples collected at three gradients depths 0-6 inches, 6-12 inches and 12-18 inches showed test results were below levels requiring response actions. Additionally, the test results from the oil/water separator sludge samples were also below levels requiring response actions. The minimal release to soil requires notification for the Subject Property at Housing Area 9 (Pearl City Peninsula).

Asbestos: The potential for ACM (e.g., transite pipe, transite sheets, window caulking, flooring tiles, linoleum, ceiling materials and roofing materials) hazard exists during renovation and/or demolition activities at the Subject Property and is considered a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Heavy Metals: The abandoned underground fuel pipeline corridor, located within the center of the Subject Property, was assigned an ECP ranking of Category 2e for lead. This structure is considered a finding of concern for the Class I Property (land) at Housing Area 9 (Pearl City Peninsula).

Canec building materials may exist at the Subject Property. The potential exists for arsenic exposure during renovation and/or demolition of canec building materials. This is a finding of concern for the Class II Property (improvements) within the Subject Property, with the exception of the 164 units constructed in 1996.

Lead Based Paint: A Lead Based Paint (LBP) survey and risk assessment was conducted for two groups of housing units within Housing Area 9 (Pearl City Peninsula), grouped by year of construction. LBP was detected at the Pearl City Peninsula housing units. None of the dust wipe samples collected from interior surfaces contained concentrations of lead exceeding HUD hazard levels of $40 \mu\text{g}/\text{ft}^2$ for floors and $250 \mu\text{g}/\text{ft}^2$ for windowsills. Eighty percent (80%) of the units constructed in 1965 and forty-five percent (45%) of the units constructed in 1970 were found to contain components painted with LBP in poor or fair condition. For additional details and recommendations specific to LBP and LBP hazards within Housing Area 9 (Pearl City Peninsula), see the *Lead Based Paint Survey and Risk Assessment for Pearl City*. The presence of LBP and LBP hazards is a finding of concern for the Class II Property (improvements) within Housing Area 9 (Pearl City Peninsula) with the exception of Basketball Court #1 which will be remediated by the DoN on or before August 28, 2006.

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Polychlorinated Biphenyls: Two on-site transformers (S716 and S722) have been assigned an ECP ranking of Category 3 for PCB because PCB concentrations have been identified at levels below those requiring a response action and no further action is recommended. These past release sites require notification for the Class I Property (land) within Housing Area 9 (Pearl City Peninsula).

Radon. The geologic formations of the Hawaiian Islands generally do not result in structures with elevated radon concentrations. However, elevated radon levels have been reported at other military installations on Oahu. No radon screening reports or test results were available for Pearl City Peninsula, thus it is possible that radon occurs in the Pearl City Peninsula Housing Area at levels exceeding the USEPA recommended corrective action level of 4 pCi/L. Radon is a finding of concern for the Class II Property (improvements) within Housing Area 9 (Pearl City Peninsula).

Other On-site Findings: Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, monitors, radioactive material in smoke detectors,

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Radon. The geologic formations of the Hawaiian Islands generally do not result in structures with elevated radon concentrations. However, elevated radon levels have been reported at other military installations on Oahu. No radon screening reports or test results were available for Red Hill Terrace, thus it is possible that radon occurs in the Red Hill Terrace Housing Area at levels exceeding the USEPA recommended corrective action level of 4 pCi/L. Radon is a finding of concern for the Class II Property (improvements) within Housing Area 10 (Red Hill Terrace).

Other On-site Findings: Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, monitors, radioactive material in smoke detectors, etc.) may be present at the Subject Property. This is a finding of potential concern for the Class II Property (improvements) at Housing Area 10 (Red Hill).

6.10.2 Off-site Findings

Cultural Resources: The Red Hill Fuel Tunnel is a historic structure and is in the vicinity of Housing Area 10 (Red Hill Terrace). This cultural resource is a finding of concern for the Class I Property (land) at Housing Area 10 (Red Hill Terrace).

Landfills: A State Hazardous Waste Site (SHWS) is located approximately one mile north-northeast and up gradient of Housing Area 10 (Red Hill Terrace). The site, Grace Pacific Corporation, was assigned low priority status following an Initial Site Screening in 1998. This is a finding of concern for the Class I Property (land) at Housing Area 10 (Red Hill Terrace).

6.11 SUMMARY OF ENVIRONMENTAL FINDINGS REQUIRING NOTIFICATION FOR HOUSING AREA 11: CATLIN PARK

Based on the findings of the EBS report, the majority of Housing Area 11 (Catlin Park) is classified with an overall ECP of Category 6, (i.e., areas where release, disposal and/or migration of hazardous substances has occurred, but required response actions have not yet been implemented). The property categorization for Housing Area 11 (Catlin Park) is summarized in Table 1 and ECP findings requiring notification for Housing Area 11 (Catlin Park) are shown in on Figure 14 and Figure 31. The following is a summary of environmental findings for Housing Area 11 (Catlin Park).

6.11.1 On-site Findings

Aboveground and Underground Storage Tanks and Petroleum-Related Structures: A Chevron owned active underground petroleum pipelines is located beneath Housing Area 11 (Catlin Park). This pipeline has been assigned an ECP ranking of Category 1 (no releases are documented); however, the potential for contamination from ruptures of this pipeline exists. This pipeline is a finding of concern for the Class I Property (land) at Housing Area 11 (Catlin Park).

Asbestos: The potential for ACM (e.g., transite pipe, transite sheets, window caulking, flooring tiles, linoleum, ceiling materials and roofing materials) hazard exists during renovation and/or demolition activities at the Subject Property and is considered a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Heavy Metals: Canec building materials may exist at the Subject Property. The potential exists for arsenic exposure during renovation and/or demolition of canec building materials. This is a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Lead-based Paint: A LBP survey and risk assessment was conducted for three groups of housing units within Housing Area 11 (Catlin Park), grouped by year of construction. LBP was detected at the housing units. None of the dust wipe samples collected from interior surfaces contained concentrations of lead exceeding HUD hazard levels of 40 µg/ft² for floors and 250 µg/ft² for windowsills. The majority of the units assessed were found to contain components painted with LBP in poor or fair condition. For additional details and recommendations specific to LBP and LBP hazards at Housing Area 11 (Catlin Park), see the *Lead Based Paint Survey and Risk Assessment for Catlin Park*. The presence of LBP and LBP hazards is a finding of concern for the Class II Property (improvements) at Housing Area 11 (Catlin Park).

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Polychlorinated Biphenyls: Transformer TV1 CPH within Housing Area 11 (Catlin Park) was assigned an ECP ranking of Category 5 for PCBs by the Site Inspection Various Transformer Sites PHNC and requires additional response actions. This is a finding of concern for the Class I Property (land) within Housing Area 11 (Catlin Park).

Transformers L-6 and TV-3 CPH are located within Housing Area 11 (Catlin Park) and have been assigned an ECP ranking of Category 3 (no response actions required). These past release sites require notification for the Class I Property (land) within Housing Area 11 (Catlin Park).

Other On-site Findings: Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, monitors, radioactive material in smoke detectors, etc.) may be present at the Subject Property. This is a finding of potential concern for the Class II Property (improvements) at Housing Area 11 (Catlin Park).

6.11.2 Off-site Findings

Aboveground and Underground Storage Tanks and Petroleum-Related Structures: One demolished UST (NS-29), associated with Building A-19 of the NMGC has been assigned an ECP ranking of Category 2c for AUP because a release of petroleum products has occurred but all required response actions have not been completed. This site is located adjacent to Housing Area 11 (Catlin Park) and is considered a finding of concern for the Class I Property (land) at Housing Area 11 (Catlin Park).

Two USTs (45 and 91) have been assigned an ECP ranking of Category 2e because either the status of the UST is unknown or there is no UST removal or closure documentation, and further investigation is required. These are findings of concern for the Class I Property (land) at Housing Area 11 (Catlin Park) because these tanks are situated in the vicinity of Housing Area 11 (Catlin Park).

UST NH-1 and UST 2604 have been assigned an ECP ranking of Category 2e because either the status of the UST is unknown or there is no UST removal or closure documentation, and further investigation is required. These structures are findings of concern for the Class I Property (land) at Housing Area 11 (Catlin Park).

Hazardous Substances/Hazardous Materials/ Hazardous Wastes: According to the SSR for the Naval Housing Area, Structure A-19 and Building 268 (demolished) have been assigned an ECP ranking of Category 7 for HS/HM/HW (further evaluation is required). Structure A-19 is located immediately adjacent to Housing Area 11 (Catlin Park). These sites are considered a finding of concern for the Class I Property (land) at Housing Area 11 (Catlin Park).

Operational Contamination/Installation Restoration Program Sites: Four sites (UST NH-1, UST 45, Building 2604 (UST) and UST 91) have been assigned an ECP ranking of Category 2e for IR (further evaluation is required). UST NS-29(D) has been assigned an ECP ranking of Category 2c for IR (requires additional response actions). Building A-19 and demolished Building 268 have been assigned an ECP ranking of Category 7 for IR (further evaluation is required). These sites require further evaluation and are a finding of concern for the Class I Property (land) at Housing Area 11 (Catlin Park).

Pesticides/Herbicides: Two sites, Structure A-19 and demolished Building 268, were assigned an ECP ranking of Category 7 (further evaluation is required). Investigation for releases of pesticides is recommended. Structure A-19 is located on the NMGC immediately adjacent to Housing Area 11 (Catlin Park). These are findings of concern for the Class I Property (land) at Housing Area 11 (Catlin Park).

6.12 SUMMARY OF ENVIRONMENTAL FINDINGS REQUIRING NOTIFICATION FOR HOUSING AREA 12: HALAWA

Based on the findings of the EBS report, the majority of Housing Area 12 (Halawa) is classified with an overall ECP of Category 6, (i.e., areas where release, disposal and/or migration of hazardous substances has occurred, but required response actions have not yet been implemented). The property categorization for Housing Area 12 (Halawa) is summarized in Table 1 and ECP findings requiring notification for Housing Area 12 (Halawa) are shown in on Figure 15 and Figure 32. The following is a summary of environmental findings for Housing Area 12 (Halawa).

6.12.1 On-site Findings

Asbestos: The potential for ACM (e.g., transite pipe, transite sheets, window caulking, flooring tiles, linoleum, ceiling materials and roofing materials) hazard exists during renovation and/or demolition activities at the Subject Property and is considered a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Heavy Metals: Canec building materials may exist at the Subject Property. The potential exists for arsenic exposure during renovation and/or demolition of canec building materials. This is a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Lead-based Paint: A LBP survey and risk assessment was conducted for Housing Area 12 (Halawa). LBP was detected at the Halawa housing units. No dust wipe samples collected from interior surfaces were found to contain concentrations of lead exceeding the HUD hazard levels of 40 µg/ft² for floors and 250 µg/ft² for windowsills. Sixty-four percent (64%) of the units assessed were found to contain components painted with LBP in poor or fair condition. For additional details and recommendations specific to LBP and LBP hazards at Housing Area 12 (Halawa), see the *Lead Based Paint Survey and Risk Assessment for Halawa*. The presence of LBP and LBP hazards is a finding of concern for the Class II Property (improvements) within Housing Area 12 (Halawa).

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the

pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Polychlorinated Biphenyls: Transformer TV-9 was assigned an ECP ranking of Category 6 for PCBs since response actions have not begun. TV-9 is located in Housing Area 12 (Halawa) and, therefore, it is considered a finding of concern for the Class I Property (land) at Housing Area 12 (Halawa).

Transformer TV3 at Housing Area 12 (Halawa) was assigned an ECP ranking of Category 3 for PCBs (a release has occurred but at concentrations that do not require a response action). This past release site requires notification for the Class I Property (land) within Housing Area 12 (Halawa).

Other On-site Findings: Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, monitors, radioactive material in smoke detectors, etc.) may be present at the Subject Property. This is a finding of potential concern for the Class II Property (improvements) at Housing Area 12 (Halawa).

6.12.2 Off-site Findings

Polychlorinated Biphenyls: Transformer R-6 was assigned an ECP ranking of Category 7 for PCBs and requires additional evaluation. This is a finding of concern for the Class I Property (land) at Housing Area 12 (Halawa).

6.13 SUMMARY OF ENVIRONMENTAL FINDINGS REQUIRING NOTIFICATION FOR HOUSING AREA 13: HALE MOKU

Based on the findings of the EBS report, the majority of Housing Area 13 (Hale Moku) is classified with an overall ECP of Category 1, (i.e., areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)). The property categorization for Housing Area 13 (Hale Moku) is summarized in Table 1 and ECP findings requiring notification for Housing Area 13 (Hale Moku) are shown on Figure 16 and Figure 33. The following is a summary of environmental findings for Housing Area 13 (Hale Moku).

6.13.1 On-site Findings

Asbestos: The potential for ACM hazard exists during renovation and/or demolition for transite pipe only within Housing Area 13 (Hale Moku) due to the recent dates of construction (2000 and 2001) of the homes. This is a finding of potential concern for the Class II Property (improvements) within Housing Area 15 (Hale Moku).

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Other On-site Findings: Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, monitors, radioactive material in smoke detectors, etc.) may be present at the Subject Property. This is a finding of potential concern for the Class II Property (improvements) at Housing Area 13 (Hale Moku).

Figure 17 and Figure 34. The following is a summary of environmental findings for Housing Area 14 (Doris Miller Park).

6.14.1 On-site Findings

Aboveground and Underground Storage Tanks and Petroleum-Related Structure: A Chevron owned active underground petroleum pipeline is located beneath Housing Area 14 (Doris Miller Park). This pipeline has been assigned an ECP ranking of Category 1 (no releases are documented); however, the potential for contamination from ruptures of this pipeline exists. This pipeline is a finding of concern for the Class I Property (land) at Housing Area 14 (Doris Miller Park).

Asbestos: The potential for ACM (e.g., transite pipe, transite sheets, window caulking, flooring tiles, linoleum, ceiling materials and roofing materials) hazard exists during renovation and/or demolition of the community center and is considered a finding of potential concern for the Class II Property (improvements) for the community center within Housing Area 14 (Doris Miller Park). The potential for ACM hazard exists during renovation and/or demolition for transite pipe only within the housing units at Housing Area 14 (Doris Miller Park) due to the recent dates of construction (1990 and 1996) of these homes other ACM materials are not likely to be present. This is a finding of potential concern for the Class II Property (improvements) within Housing Area 14 (Doris Miller Park).

Heavy Metals: Canec building materials may exist at the community center of the Subject Property. The potential exists for arsenic exposure during renovation and/or demolition of canec building materials. This is a finding of potential concern for the Class II Property (improvements) within the Subject Property.

One site within Housing Area 14 (Doris Miller Park) was identified as a having lead in soil and all response actions have been taken (Category 4). This past release site requires notification for the Class I Property (land) within Housing Area 14 (Doris Miller Park).

Lead-based Paint: A lead-based paint survey was not conducted for Housing Area 14 (Doris Miller Park). Therefore, potential for LBP hazards exists during demolition and/or renovation activities at the community center. The housing units at Housing Area 14 (Doris Miller Park) were constructed in 1990 and 1996 and are not likely to contain lead-based paint. During the 27 June 2006 site inspection, the community center was observed to have deteriorated exterior paint. The potential for LBP hazards at the community center and the presence of deteriorated exterior paint is considered a finding of concern for the Class I Property (land) and the Class II Property (improvements) for the community center within Housing Area 14 (Doris Miller Park).

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Polychlorinated Biphenyls: Transformer L-12 has been assigned an ECP ranking of Category 3 for PCBs (releases are below action levels). This past release site requires notification for the Class I Property (land) within Housing Area 14 (Doris Miller Park).

Other On-site Findings: Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, monitors, radioactive material in smoke detectors,

Mini-Mart, Gas Station and Dunkin Donuts. Until the former contents of this drum are identified, this is a finding of potential concern for the Class I Property (land) at Housing Area 14 (Doris Miller Park).

6.15 SUMMARY OF ENVIRONMENTAL FINDINGS REQUIRING NOTIFICATION FOR HOUSING AREA 15: MALOELAP

Based on the findings of the EBS report, the majority of Housing Area 15 (Maloelap) is classified with an overall ECP of Category 3, (i.e., areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a response action). The property categorization for Housing Area 15 (Maloelap) is summarized in Table 1 and ECP findings requiring notification for Housing Area 15 (Maloelap) are shown on Figure 18 and Figure 35. The following is a summary of environmental findings for Housing Area 15 (Maloelap).

6.15.1 On-site Findings

Aboveground and Underground Storage Tanks and Petroleum-Related Structures: The site reconnaissance for the EBS indicated an underground petroleum pipeline owned by the Chevron Corporation. This pipeline has an ECP ranking of Category 1 (no releases are documented); however, the potential for contamination from ruptures of this pipeline exists. Since this pipeline contains petroleum, it is a finding of concern for the Class I Property (land) within Housing Area 15 (Maloelap).

Asbestos: The potential for ACM (e.g., transite pipe, transite sheets, window caulking, flooring tiles, linoleum, ceiling materials and roofing materials) hazard exists during renovation and/or demolition activities at the Subject Property and is considered a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Cultural Resources: Historic facilities (cultural resources) including single family dwellings exist in Housing Area 15 (Maloelap). These are findings of concern for the Class I Property (land) and Class II Property (improvements) within Housing Area 15 (Maloelap).

Heavy Metals: Canec building materials may exist at the Subject Property. The potential exists for arsenic exposure during renovation and/or demolition of canec building materials. This is a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Lead-based Paint: A LBP survey and risk assessment was conducted for two groups of housing units within Housing Area 15 (Maloelap), grouped by year of construction. LBP was detected at both housing groups. Dust wipe samples collected from interior surfaces did not contain concentrations of lead exceeding HUD hazard levels of 40 µg/ft² for floors and 250 µg/ft² for windowsills. All six units in the 1947 group were found to contain components painted with LBP in poor or fair condition. Eighty percent (80%) of the units in the 1973 group were found to contain components painted with LBP in poor or fair condition, although none of the components were considered to be a neighborhood-wide concern. For additional details and recommendations specific to LBP and LBP hazards at Housing Area 15 (Maloelap), see the *Lead Based Paint Survey and Risk Assessment for Maloelap*. The presence of LBP and LBP hazards is a finding of concern for the Class II Property (improvements) at Housing Area 15 (Maloelap).

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

areas). The property categorization for Housing Area 17 (Pearl City PAN AM) is summarized in Table 1 and ECP findings requiring notification for Housing Area 17 (Pearl City PAN AM) are shown on Figure 19 and Figure 36. The following is a summary of environmental findings for Housing Area 17 (Pearl City PAN AM).

6.17.1 On-site Findings

Asbestos: The potential for ACM (e.g., transite pipe, transite sheets, window caulking, flooring tiles, linoleum, ceiling materials and roofing materials) hazard exists during renovation and/or demolition activities at the Subject Property and is considered a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Cultural Resources: According to the Integrated Cultural Resources Management Plan (ICRMP) for the PHNC, Pearl City Peninsula contains an historic management zone. This zone is both in the vicinity of and within Housing Area 17 (Pearl City PAN AM). Within this historic management zone are several facilities that are listed as historic (cultural resources). The historic management zone and the historic facilities are a finding of concern for the Class I Property (land) and Class II Property (improvements) within Housing Area 17 (Pearl City PAN AM).

Heavy Metals: Five housing units within Housing Area 17 (Pearl City PAN AM) were assessed for the presence of lead in soil as part of a LBP Risk Assessment. One of the soil samples from 364 Laniwai (Fac. 636) was found to contain concentrations of lead exceeding the USEPA Region 9 PRG of 400 ppm. Concentrations of lead in soil exceeding 400 ppm is a finding of concern, per USEPA. Therefore, this site is assigned an ECP ranking of Category 6 (releases have occurred and response actions have not begun). The presence of lead-contaminated soil is a finding of concern for the Class I Property (land) at Housing Area 17 (Pearl City PAN AM).

Canec building materials may exist at the Subject Property. The potential exists for arsenic exposure during renovation and/or demolition of canec building materials. This is a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Lead-based Paint: A LBP survey and risk assessment was conducted for three groups of housing units within Housing Area 17 (Pearl City PAN AM), grouped by year of construction. LBP was detected at all three housing groups. A dust wipe sample collected from an interior windowsill at one of the units contained concentrations of lead exceeding the HUD hazard level of 250 $\mu\text{g}/\text{ft}^2$ for window sills. All three housing groups were found to contain components painted with LBP in poor or fair condition. For additional details and recommendations specific to LBP and LBP hazards at Housing Area 17 (Pearl City PAN AM), see the *Lead Based Paint Survey and Risk Assessment for Pearl City*. The presence of LBP and LBP hazards is a finding of concern for the Class II Property (improvements) within Housing Area 17 (Pearl City PAN AM).

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Radon. The geologic formations of the Hawaiian Islands generally do not result in structures with elevated radon concentrations. However, elevated radon levels have been reported at other military installations on Oahu. No radon screening reports or test results were available for Pearl City PAN AM, thus it is possible that radon occurs in the Pearl City PAN AM Housing Area at levels exceeding the USEPA recommended corrective action level of 4 pCi/L. Radon is a finding of concern for the Class II Property (improvements) within Housing Area 17 (Pearl City PAN AM).

activities at the Subject Property and is considered a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Heavy Metals: Canec building materials may exist at the Subject Property. The potential exists for arsenic exposure during renovation and/or demolition of canec building materials. This is a finding of potential concern for the Class II Property (improvements) within the Subject Property.

Lead-based Paint: A LBP survey and risk assessment was conducted for Housing Area 18 (PMRF Kauai). LBP was detected at the PMRF Kauai housing units. A dust wipe sample collected from an interior floor was found to contain concentrations of lead exceeding the HUD hazard level of 40ug/ft² for floors. Sixty-six percent (66%) of the units assessed were found to contain components painted with LBP in poor or fair condition, although none of the components were considered to be a neighborhood-wide concern. For additional details and recommendations specific to LBP and LBP hazards at Housing Area 18 (PMRF Kauai), see the *Lead Based Paint Survey and Risk Assessment for PMRF*. The presence of LBP and LBP hazards is a finding of concern for the Class II Property (improvements) at Housing Area 18 (PMRF Kauai).

Pesticides/Herbicides: Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

Other On-site Findings: Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, monitors, radioactive material in smoke detectors, etc.) may be present at the Subject Property. This is a finding of potential concern for the Class II Property (improvements) at Housing Area 18 (PMRF Kauai).

6.18.2 Off-site Findings

Cultural Resources: Historic facilities (cultural resources) exist in the vicinity of Housing Area 18 (PMRF) including underground buildings and magazines. These are findings of concern for the Class I Property (land) at Housing Area 18 (PMRF Kauai).

Natural Resources: There is a designated critical habitat (natural resource) for *Panicum niihauense* (Lau'ehu) located along shoreline areas adjacent to the housing areas at Barking Sands. This natural resource is a finding of concern for the Class I Property (land) at Housing Area 18 (PMRF Kauai).

Off-site Notification:

1. Housing Area 2 (Ford Island): When foundations for Bldg 459 were excavated, the contractor uncovered an unexploded anti-aircraft round, presumably from the December 7, 1941 attack. Also, when the area fronting Wharf Fox 5 was dredged for the wharf expansion required to berth the USS MISSOURI, the dredging contractor found a torpedo, presumably from the attack. Although both incidences were mitigated, the potential presence of ordnance in the vicinity of Housing Area 2 (Ford Island) is a finding of concern for the Class I Property (land) at Housing Area 2 (Ford Island).

7.2.14 Pesticides/Herbicides

Through this FOS, the Government has notified the Public-Private Entity of the potential presence of pesticide-contaminated soil within and in the vicinity of the Subject Property. The following notifications, covenants, and restrictions apply:

On-site Notification:

1. All housing areas: Pesticides and/or herbicides (e.g., DDT, chlordane, dieldrin and heptachlor) residues may be present in the soils at Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of potential concern for the Class I Property (land) within the Subject Property.

On-site Covenant:

- The Public-Private Entity shall manage pesticide-contaminated soil in accordance with applicable laws and regulations. Additionally, areas with pesticide-contaminated soils shall be evaluated to ensure that they do not pose an unreasonable human health risk to people residing or working regularly in those areas.

On-site Restrictions:

- The Public-Private Entity shall maintain the pest management records contained in Appendix A and make them available for inspection and/or submittal either in hard copy form or by electronic version to the Government at the Government's discretion.
- The Public-Private Entity shall develop a Pest Management Plan which outlines the pest management program for the leased property.
- The Public-Private Entity shall comply with and implement the provisions of the Pesticide Management Plan that has been approved by the Government. The Pesticide Management Plan shall be prepared and submitted at least two months prior to commencement of site work by the Public-Private Entity and adequately address the pesticide contaminated soil at the subject property. Site work shall not begin until the Pesticide Management Plan has been approved by the Government.
- The Public-Private Entity shall adhere to current and future revisions to DoN Policies as it relates to pesticides/herbicides use and management.
- No pesticides brought to the Subject Property after the execution of the Real Estate Agreement or pesticide-contaminated materials shall be stored or disposed of on

Government property without Government concurrence. Pesticides used in applications must be transported onto Government property from off-site storage facilities.

- Handling and disposal of pesticide-contaminated soil disturbed during construction or any other activity will be the responsibility of the Public-Private Entity.
- Prior to offsite disposal of pesticide-contaminated soil, the Public-Private Entity shall perform the Toxicity Characteristic Leaching Procedure (TCLP) test. The Public-Private Entity shall handle and dispose of TCLP tested soil of greater than RCRA limit as a “hazardous waste.”
- The Public-Private Entity shall maintain interim soil control measures that are currently in place. Interim control measures might include covering soil with mulch, grass, shrubs, or other types of vegetation to prevent soil from being exposed.
- The Public-Private Entity shall implement the Public-Private Entity-prepared and Government-approved plan that sets forth the procedures to mitigate or manage all risks from pesticide exposure that may exist on the Subject Property on or prior to the Public-Private Entity taking possession of the Subject Property, including, but not limited to, chlorinated pesticides from exposure pathways created during excavation and renovation and new construction projects.
- Prior to excavation of soil, the Public-Private Entity shall assess the soil’s chlorinated pesticide concentration. For any project that will disturb potential pesticide-contaminated (defined as a concentration greater than the USEPA’s PRG) soil, construction specifications will include worker and public health protection measures, including but not limited to, personnel and area monitoring, and use of water sprays to minimize fugitive dust. Pesticide-contaminated soil disturbed during construction will be addressed in accordance with federal, state, and local laws and in a manner that is protective of human health and the environment at the new owner’s/lessee’s own expense. This may include but is not limited to: (1) disposed of off-site; (2) covered with an appropriate cap; or (3) reused under building concrete slabs.

Off-site Notifications:

1. Housing Area 5 (Makalapa): The Former Pesticide Rinsate Area has been assigned an ECP ranking of Category 5 for Pesticides/Herbicides because releases of Pesticides requiring response actions have been identified and all required response actions at these sites have not been completed. These are findings of concern for the Class I Property (land) at Housing Area 5 (Makalapa) because these sites are located in the vicinity of Housing Area 5 (Makalapa).
2. Housing Area 11 (Catlin Park): Two sites, Structure A-19 and demolished Building 268, were assigned an ECP ranking of Category 7 (further evaluation is required). Investigation for releases of pesticides is recommended. Structure A-19 is located on the Navy-Marine Golf Course immediately adjacent to Housing Area 11 (Catlin Park). These are findings of concern for the Class I Property (land) at Housing Area 11 (Catlin Park).
3. Housing Area 14 (Doris Miller Park): Structure A-19 and demolished Building 268 were assigned an ECP ranking of Category 7 for pesticides (further evaluation is required). Investigation for releases of pesticides is recommended as these sites are located in the vicinity of Housing Area 14 (Doris Miller Park). This is a finding of concern for the Class I Property (land) at Housing Area 14 (Doris Miller Park).

4. Housing Area 15 (Maloelap): Two sites, Structure A-19 and demolished Building 268, were assigned an ECP ranking of Category 7 (further evaluation is required). Investigation for releases of pesticides is recommended. These are in the vicinity of Housing Area 15 (Maloelap) and are findings of concern for the Class I Property (land) at Housing Area 15 (Maloelap).

7.2.15 Polychlorinated Biphenyls

Through this FOS, the Government has notified the Public-Private Entity of the potential presence of PCBs contamination within and in the vicinity of the Subject Property. The following notifications, covenants, and restrictions apply:

On-site Notifications:

1. Housing Area 1 (Camp Stover): Transformers TV1, TV2, TV3A, TV4, TV5, TV6, TV7, TV8, TV9, TV11A, TV12, TV16, TV17 and TV18 are assigned an ECP ranking of Category 3 for PCBs since PCBs in soil and/or concrete wipe samples were detected above laboratory reporting limits indicating a release has occurred but not at concentrations that require a response action. Transformer TV-10 has PCBs in soil at concentrations of 0.270 milligrams per kilogram (mg/kg) which is above the United States Environmental Protection Agency (USEPA) Preliminary Remediation Goal (PRG) of 0.220 mg/kg for residential areas but below the State of Hawaii Department of Health (DOH) PRG of 1.1 mg/kg and the DOH Environmental Action Level (EAL) of 1.1 mg/kg for sites above the underground injection control (UIC) line (an area that is a potential source of drinking water) and Camp Stover is above the UIC. On this basis TV-10 is assigned an ECP ranking of Category 3 for PCBs and no further characterization is recommended. Releases have occurred at these on-site transformers. These past release sites require notification for the Class I Property (land) within Camp Stover.
2. Housing Area 2 (Ford Island): According to the SSR for Ford Island, there were 55 transformer sites comprising an IR Program site. Eight of these transformers are on-site. These sites were identified as requiring additional investigation at Ford Island. Three of the on-site transformers (TK-01D, TL-02, and S252D) were identified in the RI for Ford Island as not requiring further response actions. These transformers are classified as Category 3. The remaining five transformer sites within Housing Area 2 (TG-01, TG-03, TG-04, TA-01 and TD-01) were identified in the RI for Ford Island as requiring soil removal actions. Soil was excavated to 1 ppm or less for these sites. LUCs are required for TG-04. These IR Program sites are classified as Category 4 (i.e., no further response actions required), with the exception of TG-04 which is a Category 4 for LUCs. These past release sites require notification for the Class I Property (land) at Housing Area 2 (Ford Island).
3. Housing Area 3 (Hale Alii): Five transformer sites (G-6, G-8, G-10, G-11 and G-22) have been assigned an ECP ranking of Category 3 because releases of hazardous substances were identified at these sites; however, concentrations of contaminants were below action levels, and response actions were not required. These past release sites require notification for the Class I Property (land) within Housing Area 3 (Hale Alii).
4. Housing Area 4 (Hospital Point): Transformer site A-4 was identified as requiring soil removal actions (Category 4). Soil was excavated to 1 ppm or less for this site. This past release site is a finding of concern for the Class I Property (land) at Housing Area 4. Transformer site A-2 requires additional response actions (Category 5). In addition, up to 3 ppm PCB has been found at Oscar 2 Pier. Oscar 2 Pier is both on-site and in the vicinity of Housing Area 4 (Hospital Point). It has an ECP ranking of Category 2c for IR. These sites are finding of concern for the Class I Property (land) within Housing Area 4 (Hospital Point).

Table B-1: Response to USEPA and DOH Comments on Draft FOST

Comment No.	Reviewer	Page	Section/ Para. No.	Comment on Draft FOS From EPA	Action
1.	Lewis Mitani	General		The General Comments were specific to the EBS concerning PCBs in light ballasts.	The EBS revisions were carried over into the FOS and include: "Consumer products which may have special disposal requirements (refrigerants, fluorescent light tubes and/or ballasts, monitors, radioactive material in smoke detectors, etc.) may be present at the Subject Property. This is a finding of concern for the Class II Property (improvements) at Housing Area X (XX)."
2.	Lewis Mitani	General		The General Comments were specific to the EBS concerning labeling of housing areas.	New ES Figures have been developed and labeled where there could be confusion. Figures have been revised to show only FOCs and are more readable. Labeling of different areas such as on Ford Island has been made to the Figures where there could be confusion.
Comment No.	Reviewer	Page	Section/ Para. No.	Comment on Draft FOST From DOH	Action
1.	Michael K. Miyasaka		7.2.12 Pesticides/ Herbicides	The Notification, needs to be more specific by stating that chlorinated pesticides including chlordane residues are probably on the property	The text has been revised to read: "Pesticides and/or herbicides residues (e.g., DDT, chlordane, dieldrin and heptachlor) may be present in the soils at the Subject Property as a result of past pest management, agricultural and/or landscape maintenance practices (Category 1). The potential for the pesticide/herbicides residues in soils at the Subject Property is considered a finding of concern for the Class I Property (land) within the Subject Property."